

This listing of claims replaces all prior versions, and listings of claims in the instant application:

Listing of Claims:

1. (Original) A data structure comprising:
a data descriptor record, wherein said data descriptor record includes
at least one addressing field, and
a type field, wherein
said type field is configured to indicate a data structure type of a data storage structure, and
said data storage structure is a data structure described by said data descriptor record.
2. (Original) The data structure of claim 1, wherein said at least one addressing field comprises:
a base address field,
an offset field, and
a length field.
3. (Original) The data structure of claim 2, wherein said data structure type is one of a contiguous buffer, a scatter-gather list and a linked list structure.
4. (Original) The data structure of claim 2, wherein said base address field is configured to store a base address, said base address is a starting address of a secondary data structure associated with said data descriptor record, and

said secondary data structure is said data storage structure.

5. (Original) The data structure of claim 2, wherein said offset field is configured to indicate a starting address of data within a secondary data structure pointed to by a base address stored in said base address field, and said secondary data structure is said data storage structure.

6. (Original) The data structure of claim 2, wherein said length field is configured to indicate a length of data stored in a secondary data structure pointed to by a base address stored in said base address field, and said secondary data structure is said data storage structure.

7. (Original) The data structure of claim 2, wherein said data descriptor record further comprises:
a context field.

8. (Original) The data structure of claim 7, wherein said context field is configured to store information regarding an address space type in which said data descriptor record exists.

9. (Original) The data structure of claim 2, wherein said data descriptor record further comprises:
an in-line data field, and
an in-line data buffer, wherein said data structure is said data storage structure.

10. (Original) The data structure of claim 9, wherein said in-line data field is configured to store information regarding said in-line data buffer.

11. (Original) The data structure of claim 10, wherein said information regarding said in-line data buffer includes a value representing a length of said in-line data buffer.

12. (Original) The data structure of claim 11, wherein said length of said in-line data buffer is capable of assuming only set values.

13. (Original) The data structure of claim 12, wherein said value assumes a non-zero value to indicate that said in-line data buffer is used.

14. (Original) The data structure of claim 11, wherein said in-line data buffer is a variable-length buffer.

15. (Original) The data structure of claim 10, wherein said in-line data buffer is configured to store data contiguously with said data descriptor record.

Please Cancel Claims 16 to 40, without prejudice.